

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
18 May 2006 (18.05.2006)

PCT

(10) International Publication Number
WO 2006/050937 A1

(51) International Patent Classification:
C08G 8/28 (2006.01) G03F 7/00 (2006.01)
B41C 1/10 (2006.01)

(21) International Application Number:
PCT/EP2005/012029

(22) International Filing Date:
8 November 2005 (08.11.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
04078079.3 9 November 2004 (09.11.2004) EP

(71) Applicant (for all designated States except US): IPAGSA
INDUSTRIAL, S.L. [ES/ES]; Sant Jordi, 15, E-08191
Rubi - Barcelona (ES).

(72) Inventor; and

(75) Inventor/Applicant (for US only): BENTLEY, Peter,
Jonathan [GB/ES]; Carrer D'Adrià Pardos, 13, E-08198
La Floresta - Barcelona (ES).

(74) Agent: BERNARDO NORIEGA, Francisco; ABG
Patentes, S.L., Orense, 68, 7th floor, E-28020 Madrid
(ES).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV,
LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG,
SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US,
UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT,
RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA,
GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

WO 2006/050937 A1

(54) Title: THERMALLY REACTIVE INFRARED ABSORPTION POLYMERS AND THEIR USE IN A HEAT SENSITIVE
LITHOGRAPHIC PRINTING PLATE

(57) Abstract: The invention provides a near infrared absorption polymer comprising at least two different pendent infra-red chro-
mophoric moieties covalently bonded to the backbone of an alkali-soluble resin, at least one of which is an indole cyanine dye and
the other of which is a benz [e]-indole cyanine dye. When used in the coating of a heat sensitive positive working lithographic print-
ing plate precursor the stabilization time needed after manufacture is significantly reduced, avoiding further conditioning processes
before use. The precursors are preferably imagewise exposed with a near-infrared laser emitting at between 780 nm and 850 nm.